

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004047**Date Inspected:** 31-Aug-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1330**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2230**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Fabrication**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

CWI Inspector: Mr. Sun Bo

Bay 8

The QA Inspector observed approximately 20 each E9018 electrodes in a portable electrode oven located adjacent to tower diaphragm plates near the center of bay 8. This electrode oven did not appear to be in use by any welder and it was not connected to any power supply. AWS D1.5 limits the amount of time this type of electrode can be exposed to atmospheric temperature and there was no indication as to how long these electrodes had been sitting in this location. The QA Inspector determined the welding electrodes appear to be at ambient temperature. The QA Inspector asked ABF QA Inspector Mr. Bi Dewei how long these electrodes had been in this location and Mr. Dewei was not able to make this determination. Mr. Dewei said these electrodes would not be used to weld Caltrans materials and that the electrodes will be removed from bay 8 later during this shift.

ZPMC notification of witness inspection document #00949 dated 8-31-2008 states that ZPMC QC inspection personnel will be conducting final ultrasonic inspections of tower diaphragm welds in bay #8. Following ZPMC ultrasonic personnel accepting ultrasonic inspections of these welds the QA Inspector performed ultrasonic

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inspection of the entire length of tower diaphragm WSD1-SA226 weld 5A/B; 6A/B; NSD1-SA265 weld 6A/B and 7A/B. The QA Inspector observed the welds appear to comply with project specifications. See the TL6027 ultrasonic test report for additional information.

ZPMC notification of witness inspection document #00950 dated 8-31-2008 states that ZPMC QC inspection personnel will be conducting final ultrasonic inspections of floor beam welds in bay #8. Following ZPMC ultrasonic personnel accepting ultrasonic inspections of these welds the QA Inspector performed ultrasonic inspection of approximately 10% length of floor beam welds FB070-001-021, FB071-001-006, FB064-002-021, FB065-001-006, FB066-001-021, FB063-003-021, FB069-001-006, FB003-115-006 and FB064-003-002. The QA Inspector observed the welds appear to comply with project specifications. See the TL6027 ultrasonic test report for additional information.



### Summary of Conversations:

See above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco 13816942685, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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